

Exhibit B

Cyclohexanone

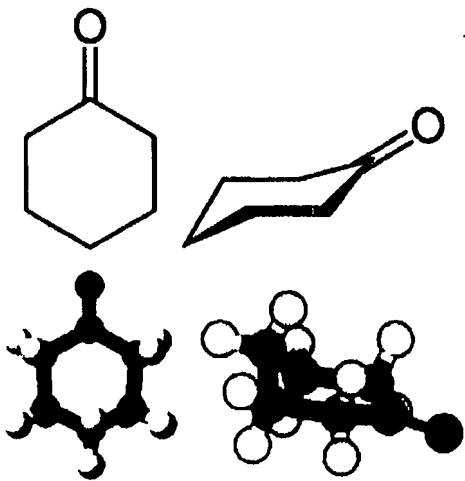

From Wikipedia, the free encyclopedia

Cyclohexanone (also known as oxocyclohexane, pimelic ketone, ketohexamethylene, cyclohexyl ketone or ketocyclohexane) is a six-carbon cyclic molecule with a ketone functional group. It is a colorless, oily liquid with an acetone-like smell. Over time, the color of the liquid changes to yellow. Cyclohexanone is slightly soluble in water (5-10 g/100 ml), but miscible with the most common organic solvents.

Cyclohexanone is employed as an industrial solvent and as activator in oxidation reactions. It is also used in the production of adipic acid, cyclohexanone resins, caprolactam and nylon 6.

External links

- International Chemical Safety Card 0425

Cyclohexanone	
	
General	
Molecular formula	$\text{C}_6\text{H}_{10}\text{O}$
SMILES	<chem>C1CCCCC1=O</chem>
Molar mass	98.15 g mol^{-1}
Appearance	Colorless, liquid
CAS number	[108-94-1]
Properties	
Density and phase	0.9478 g/ml , liquid
Solubility in water	Miscible
Solubility in ethanol	Miscible
Melting point	$-16.4\text{ }^{\circ}\text{C}$
Boiling point	$155.65\text{ }^{\circ}\text{C}$
Viscosity	0.898 cP at $25\text{ }^{\circ}\text{C}$
Thermodynamic data	
Standard enthalpy of formation $\Delta_f H^{\circ}_{\text{liquid}}$	$-270.7\text{ kJ mol}^{-1}$
Standard enthalpy of combustion $\Delta_c H^{\circ}_{\text{liquid}}$	$-3519.3\text{ kJ/mol}^{-1}$
Standard molar entropy $S^{\circ}_{\text{liquid}}$	$+229.03\text{ J.K}^{-1}.\text{mol}^{-1}$
Hazards	
EU classification	Harmful (Xn)
Flash Point	$44\text{ }^{\circ}\text{C}$
NFPA 704	

R-phrases	R10, R20
S-phrases	(S2), S25
Supplementary data page	
Structure and properties	n_D^{20} :1.4503, ϵ_r , etc.
Thermodynamic data	Phase behaviour Solid, liquid, gas
Spectral data	UV, IR, NMR, MS
Regulatory data	Flash point, RTECS number, etc.
Related compounds	
Related ketones	Cyclopentanone
Related compounds	Cyclohexanol
Except where noted otherwise, data are given for materials in their standard state (at 25 °C, 100 kPa)	
Infobox disclaimer and references	

(http://www.ilo.org/public/english/protection/safework/cis/products/icsc/dtasht/_icsc04/icsc0425.h)

- NIOSH Pocket Guide to Chemical Hazards (<http://www.cdc.gov/niosh/npg/npgd0166.html>)
- IARC Monograph "Cyclohexanone" (<http://www-cie.iarc.fr/htdocs/monographs/vol47/47-04.htm>)

- Links to external chemical sources

Retrieved from "<http://en.wikipedia.org/wiki/Cyclohexanone>"

Categories: Ketones | IARC Group 3 carcinogens | Organic compound stubs

- This page was last modified 01:03, 22 June 2007.
- All text is available under the terms of the GNU Free Documentation License. (See **Copyrights** for details.) Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a US-registered 501(c)(3) tax-deductible nonprofit charity.